Subject: write_png help
Posted by gunvicsin11 on Thu, 01 Dec 2016 08:56:46 GMT

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Hi all,
    I have given below my program to create a series of frame*.png. But after doing this, s number of frames are created. But all the frames are showing same data. I think there is some problem with the code below, Can anyone please let me know what is the problem here.


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restore,'negdatanew.sav',/v
s=size(ksom.data,/dim)
for i=0,s(2)-1 do begin
write_png,'frame'+string(i)+'.png',ksom(i).data
write_png,'frame'+string(i)+'.png',tvrd(/true)
endfor
```


thanks

Subject: Re: write_png help
Posted by Sergey Anfinogentov on Thu, 01 Dec 2016 09:33:55 GMT

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"write_png,'frame'+string(i)+'.png',tvrd(/true)" - Here you write the content of your current direct graphics window, but you don't redraw it inside the FOR loop. Therefore, all images are the same.

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Subject: Re: write_png help
Posted by gunvicsin11 on Thu, 01 Dec 2016 10:07:46 GMT

On Thursday, December 1, 2016 at 3:03:57 PM UTC+5:30, Sergey Anfinogentov wrote:
> "write_png,'frame'+string(i)+'.png',tvrd(/true)" - Here you write the content of your current direct graphics window, but you don't redraw it inside the FOR loop. Therefore, all images are the same.
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So how do we do this in a loop, because if I dont give this
write_png,'frame'+string(i)+'.png',tvrd(/true) then I am getting some odd values in between the image.

Subject: Re: write_png help
Posted by dg86 on Thu, 01 Dec 2016 11:24:20 GMT

On Thursday, December 1, 2016 at 3:56:48 AM UTC-5, sid wrote:
> Hi all,
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> write_png,'frame'+string(i)+'.png',tvrd(/true)
> endfor
>
>
> thanks

If you're doing this at the command line or in a batch file, the FOR loop has to be written as a single line of code.
Each of the commands within the FOR loop, furthermore, has to end with the "command termination" character, '&'. A loop that loops over three commands could be written on a single line as

for i = 0, s[2]-1 do begin command1 & command2 & command3 & endfor

You can avoid having a long ugly line of code by using the "line continuation" character, '$'.
In that case, my example could be formatted as

```
for i = 0, s[2]-1 do begin $
   command1 & $
   command2 & $
   command3 & $
endfor
```

Notice that there's only a continuation character after BEGIN. You don't want to end the FOR loop before any of the commands are executed!

If you don't express the FOR loop as a single logical line of code, only the first line will actually execute within the loop. In your case, that would be the line that reads

for i = 0, s[0]-1 do begin

The loop will increase the variable i from 0 to s[0]-1, without doing anything else.
Once that's done, the script will execute the next line (write_png ...) and write one image for the particular case, i = s[0]-1, which is the value of i at the end of the loop.

You only need to express a FOR loop as a single line of code if
(1) you're at the command line or (2) you're creating a batch file
(e.g. mybatchfile.pro) and running it using the '@' directive (e.g. IDL> @mybatchfile).

All the best,

David

Subject: Re: write_png help
Posted by Markus Schmassmann on Thu, 01 Dec 2016 16:36:43 GMT
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On 12/01/2016 12:24 PM, David Grier wrote:
> for i = 0, s[0]-1 do begin
>
> The loop will increase the variable i from 0 to s[0]-1, without doing anything else.
> Once that's done, the script will execute the next line (write_png ...) and write one
> image for the particular case, i = s[0]-1, which is the value of i at the end of the loop.

actually, at the end of the last loop i is incremented once more:
IDL> for i=0,9 do begin
IDL> print, i
    10

Subject: Re: write_png help
Posted by Sergey Anfinogentov on Fri, 02 Dec 2016 11:13:43 GMT

> On Thursday, December 1, 2016 at 3:03:57 PM UTC+5:30, Sergey Anfinogentov wrote:
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> So how do we do this in a loop, because if I dont give this
write_png,'frame'+string(i)+'.png',tvrd(/true) then I am getting some odd values in between the image.

I assume that you you run a normal IDL program (not a batch file) and don't type all lines directly to the command line. Otherwise, see other comments.
1) What kind of data do you have in your "ksom.data " variable? If it is not a byte array, you can't pass it directly to write_png routine. First, you need to rescale it and convert to array of bytes:
    image = bytscl(ksom.data[*,*,i])
Only after that you can save the image in a PNG file:
    write_png, 'frame'+string(i)+'.png', image
In this case your code will be the following:

    restore,'negdatanew.sav'
    s=size(ksom.data,/dim)
    for i=0,s(2)-1 do begin
        image = bytscl(ksom.data[*,*,i])

```
        write_png, 'frame'+string(i)+'.png', image
    endfor
```

2) If your want to produce nice images with axes and in colour, you need to plot it first in a direct graphics window, than read the result and write it to a png file.

```
    restore,'negdatanew.sav'
    s=size(ksom.data,/dim)
    for i=0,s(2)-1 do begin
        tvscl, ksom.data[*,*,i] ; replace with your plotting code
         image = tvrd(true =1)
        write_png, 'frame'+string(i)+'.png', image
    endfor
```